

B.Sc. First Year (Data Science) NEP Semester-I
BSCDS013 - Introduction to Programming

P. Pages : 1

Time : Three Hours



GUG/S/25/15257

Max. Marks : 40

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1. a) What is Python? Explain its features in detail. 4
b) Explain Variable in detail. 4

OR

- c) Explain Data Types in Python. 4
d) Explain following in detail. 4
i) for loop ii) while loop
iii) if-else statement iv) nested-if else statement.
2. a) Explain function in detail. 4
b) Explain following in detail 4
i) Lambda Function ii) Arithmetic operator
iii) Bitwise operator iv) Precedence operators

OR

- c) What is array? Explain in detail 4
d) What is Function? and explain built in function. 4
3. a) Explain list in detail. 4
b) Write a Difference between List, Tuple, and Dictionary. 4

OR

- c) Explain Regular Expression. 4
d) Explain Date and Time in detail. 4
4. a) Explain NumPy array with example. 4
b) Describe IPython magic commands. 4

OR

- c) Describe IPython and shell command. 4
d) Explain NumPy Structured arrays.
5. a) Compare Python with "c" and Java in detail. 2
b) Explain all string function in detail. 2
c) Explain Dictionary methods in detail. 2
d) Explain NumPy and Explain how to install NumPy in our system. 2
